

P ***Artemisia dracunculus***

Common Name(s)

Tarragon

How Used

G

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|---|------------------|----------|--------|--|----------|
| 0 | (E)-2-DIHYDROXY-4-METHOXY-4-METHOXYCINNAMIC-ACID-METHYL-ETHER | Plant | -- | -- | | |
| 0 | (E)-ARTEMIDIN | Plant | -- | -- | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. | 1991. |
| 0 | (Z)-ARTEMIDIN | Plant | -- | -- | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. | 1991. |
| 0 | 1,2-DIMETHOXY-4-ALLYL-BENZENE | Shoot | -- | -- | | |
| 0 | 1,8-CINEOL | Essential Oil | -- | 68800 | -0.23220200822943154 | |
| 0 | 1,8-CINEOL | Leaf Essent. Oil | -- | 50000 | -0.6071044965246614 | |
| 67 | 1,8-CINEOLE | Shoot | 50 | 500 | -0.12842761628622745 | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|--|---------|----------|--------|--------------------|---|
| 0 | 1-(BUT-2-YNYL)-ISOCOUMARIN | Root | 270 | 270 | | |
| 0 | 1-(BUT-2-YNYL)-ISOCOUMARIN | Shoot | -- | 42 | | |
| 0 | 2,4,6-TRIMETHOXYCINNAMYL-ALCOHOL | Shoot | -- | 11 | | |
| 0 | 2-CARBOXYARABINITOL | Leaf | -- | 903 | 1.9532419928562945 | Moore, B. D., Isidoro, E., Seemann, J. R. 1993. Distribution of 2-Carboxyarabinitol Among Plants. <i>Phytochemistry</i> 34: 703-707. Dept. Biochem. Univ. Nevada Reno 89557, USA. |
| 0 | 2-HEPTANONE | Plant | -- | -- | | |
| 0 | 2-HYDROXY-4-METHOXY-TRANS-CINNAMIC-ACID | Leaf | 143 | 143 | | |
| 0 | 3',5'-DIHYDROXY-4',7-DIMETHOXY-FLAVANONE | Shoot | 16 | 16 | | |
| 0 | 3,4',5-TRIHYDROXY-3',7-DIMETHOXY-FLAVANONE | Shoot | 312 | 312 | | |
| 0 | 3,4',5-TRIHYDROXY-7-METHOXY-FLAVANONE | Shoot | 250 | 250 | | |
| 0 | 3-(BUT-CIS-1-YNYL)-ISOCOUMARIN | Root | -- | 1500 | | |
| 0 | 3-(BUT-TRANS-1-YNYL)-5-HYDROXY-ISOCOUMARIN | Root | -- | 50 | | |
| 0 | 3-(BUT-TRANS-1-YNYL)-8-HYDROXY-ISOCOUMARIN | Root | -- | 15 | | |
| 0 | 3-(BUT-TRANS-1-YNYL)-ISOCOUMARIN | Root | -- | 100 | | |
| 0 | 3-BUT-CIS-1-ENYL-ISOCOUMARIN | Root | 1500 | 1500 | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|--|-------------------------|----------|--------|-----------|--|
| 0 | 3-BUT-TRANS-1-ENYL-5-HYDROXY-ISOCOUMARIN | Root | 50 | 50 | | |
| 0 | 3-BUT-TRANS-1-ENYL-8-HYDROXY-ISOCOUMARIN | Root | 15 | 15 | | |
| 0 | 3-BUT-TRANS-1-ENYL-ISOCOUMARIN | Root | 100 | 100 | | |
| 0 | 4-ALLYL-1,2-DIMETHOXYBENZENE | Shoot Essent. Oil | -- | -- | | |
| 0 | 4-HYDROXY-BENZOIC-ACID | Leaf | -- | 14 | | |
| 0 | 4-METHOXYCINNAMALDEHYDE | Plant | -- | -- | | |
| 1 | 6,7-DIMETHOXYCOUMARIN | Shoot | -- | -- | | Wealth of India. |
| 0 | 7-(ALPHA-D-GALACTOPYRANOSIDE)-P-HYDROXYBENZOATE-ISORHAMNETIN | Shoot | -- | -- | | |
| 3 | 7-METHOXYCOUMARIN | Shoot | -- | -- | | Wealth of India. |
| 0 | 7-O-METHYLAROMADENDRIN | Shoot | -- | 250 | | |
| 0 | 9-HYDROXYGERANIOL | Shoot | -- | 54 | | |
| 0 | AESCULETIDIN-DIMETHYL-ETHER | Plant | -- | -- | | |
| 0 | AESCULETIDIN-DIMETHYL-ETHER | Essential Oil | -- | -- | | |
| 32 | AESCULETIN | Shoot | -- | -- | | |
| 3 | ALANINE | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 1 | ALLO-OCIMENE | Shoot | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|-------------------------|------------------------|---------------|--------|----------------------|--|
| 1 | ALLO-OCIMENE | | Essential Oil | -- | | |
| 0 | ALPHA-ALANINE | Root | -- | -- | | |
| 0 | ALPHA-ALANINE | Leaf | -- | -- | | |
| 3 | ALPHA-CEDRENE | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 11 | ALPHA-PHELLANDRENE | Plant | -- | -- | | |
| 11 | ALPHA-PHELLANDRENE | | Essential Oil | -- | | |
| 11 | ALPHA-PHELLANDRENE | Leaf Essent. Oil | -- | -- | | |
| 28 | ALPHA-PINENE | Shoot | 100 | 1000 | -0.04771656404793942 | |
| 28 | ALPHA-PINENE | Leaf Essent. Oil | -- | -- | | |
| 28 | ALPHA-PINENE | Root Essent. Oil | -- | -- | | |
| 28 | ALPHA-PINENE | Essential Oil | -- | 10000 | -0.47207505752571344 | |
| 0 | ALPHA-PROSTAGLANDIN-F-2 | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|----------------|---------------|----------|--------|-----------|--|
| 36 | ANETHOLE | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 36 | ANETHOLE | Essential Oil | -- | -- | | |
| 7 | ANISALDEHYDE | Essential Oil | -- | -- | | |
| 6 | ANISIC-ACID | Shoot | 8 | 80 | | |
| 6 | ANISIC-ACID | Essential Oil | -- | -- | | |
| 0 | ANISIC-ALCOHOL | Shoot | -- | -- | | |
| 0 | ANISIC-ALCOHOL | Essential Oil | -- | -- | | |
| 4 | ANISOLE | Shoot | 10 | 100 | | |
| 0 | ANNAGENIN | Shoot | -- | -- | | |
| 101 | APIGENIN | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 14 | ARGININE | Leaf | -- | -- | | |
| 14 | ARGININE | Root | -- | -- | | |
| 0 | ARTEMEDINAL | Shoot | -- | -- | | |
| 0 | ARTEMEDINOL | Root | -- | -- | | |
| 0 | ARTEMIDIN | Plant | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|------------------|------------------------|----------|--------|--|----------|
| 0 | ARTEMIDIN | Shoot | -- | -- | | |
| 0 | ARTEMIDIN | Root | -- | -- | | |
| 0 | ARTEMIDINAL | Shoot | -- | -- | | |
| 0 | ARTEMIDINAL | Plant | -- | -- | | |
| 0 | ARTEMIDINOL | Plant | -- | -- | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. | 1991. |
| 0 | ARTEMIDINOL | Root | -- | -- | | |
| 0 | ARTEMIDIOL | Root | -- | -- | | |
| 0 | ARTEMISIA-KETONE | Leaf | 50 | 500 | -1 | |
| 0 | ARTEMISIA-KETONE | Leaf Essent. Oil | -- | 50000 | | |
| 0 | ARTIMIDINAL | Shoot | -- | -- | | |
| 0 | ARTIMIDINAL | Plant | -- | -- | | |
| 0 | ARTIMIDINE | Shoot | -- | -- | | |
| 0 | ARTIMIDINE | Plant | -- | -- | | |
| 112 | ASCORBIC-ACID | Leaf | 588 | 588 | -0.3893611896312945 | |
| 2 | ASPARAGINE | Leaf | -- | -- | | |
| 2 | ASPARAGINE | Root | -- | -- | | |
| 3 | ASPARTIC-ACID | Leaf | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|--------------------|------------------------|----------|--------|---------------------|---|
| 3 | ASPARTIC-ACID | Root | -- | -- | | |
| 0 | ATEMITIN | Shoot | -- | -- | | |
| 0 | BENZYL-DIACETYLENE | Root | -- | -- | | |
| 0 | BENZYL-DIACETYLENE | Root Essent. Oil | -- | -- | | |
| 53 | BETA-CAROTENE | Leaf | 2 | 74 | -0.8156731064057301 | |
| 2 | BETA-MYRCENE | Shoot | -- | -- | | |
| 3 | BETA-PHELLANDRENE | Shoot | 100 | 1070 | 4.04416490771926 | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 13 | BETA-PINENE | Shoot | -- | -- | | |
| 13 | BETA-PINENE | Leaf Essent. Oil | -- | -- | | |
| 13 | BETA-PINENE | Essential Oil | -- | -- | | |
| 47 | BETA-SITOSTEROL | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 47 | BETA-SITOSTEROL | Shoot | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|-----------------|------------------------|----------|--------|----------------------|--|
| 47 | BETA-SITOSTEROL | Leaf | -- | -- | | |
| 0 | BIOQUERCETIN | Shoot | -- | -- | | |
| 6 | BUTYRIC-ACID | Plant | -- | -- | | |
| 102 | CAFFEIC-ACID | Shoot | -- | -- | | |
| 102 | CAFFEIC-ACID | Leaf | 7640 | 7640 | 0.34397264551688544 | |
| 28 | CALCIUM | Plant | 11390 | 12340 | -0.1336433279618558 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 2 | CAMPESTEROL | Shoot | -- | 30 | 1 | Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) |
| 9 | CAMPHENENE | Leaf | -- | -- | | |
| 9 | CAMPHENENE | Leaf Essent. Oil | -- | -- | | |
| 9 | CAMPHENENE | Essential Oil | -- | -- | | |
| 41 | CAMPHOR | Shoot | 20 | 200 | -0.14976698900024374 | |
| 41 | CAMPHOR | Essential Oil | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|---------------|-------------------------|---------------|---------------------|---|----------|
| 41 | CAMPHOR | Leaf Essent. Oil | -- | 20000 | -0.7174269876896714 | |
| 2 | CAPILLARIN | Shoot | 920 | 920 | | |
| 0 | CAPILLENE | Shoot | -- | 108 | | |
| 0 | CAPILLENE | Shoot Essent. Oil | -- | -- | | |
| 5 | CAPILLIN | Root | -- | -- | | |
| 5 | CAPILLIN | Root Essent. Oil | -- | -- | | |
| 0 | CAR-3-ENE | Shoot | -- | -- | | |
| 0 | CAR-3-ENE | Essential Oil | -- | -- | | |
| 0 | CAR-4-ENE | Shoot | -- | -- | | |
| 0 | CAR-4-ENE | Leaf Essent. Oil | -- | -- | | |
| 0 | CARBOHYDRATES | Plant | 502000 544000 | -0.8267191461120625 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses | |
| 0 | CARBOHYDRATES | Leaf | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|---------------------------|-------------------|----------|--------|-----------|--|
| 0 | CARBOHYDRATES | Root | -- | -- | | |
| 19 | CARVONE | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | CHAVICOL-METHYL-ETHER | Shoot | -- | -- | | |
| 77 | CHLOROGENIC-ACID | Shoot | -- | -- | | |
| 7 | CHRYSOERIOL | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | CINNAMIC-ACID-ACETATE | Shoot | -- | -- | | |
| 0 | CINNAMIC-ACID-ACETATE | Essential Oil | -- | -- | | |
| 1 | CINNAMIC-ACID-ETHYL-ESTER | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 10 | CIRSIMARITRIN | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | CIRSIMARITRIN | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | CIS-ALLO-OCIMENE | Shoot | -- | -- | | |
| 0 | CIS-ALLO-OCIMENE | Shoot Essent. Oil | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|--------------------|-------------------------|-------------|--------|---------------------|--|
| 0 | CIS-ALPHA-OCIMENE | Leaf Essent. Oil | -- | -- | | |
| 0 | CIS-ALPHA-OCIMENE | Root Essent. Oil | -- | -- | | |
| 0 | CIS-BETA-OCIMENE | Essential Oil | -- | -- | | |
| 0 | CIS-BETA-OCIMENE | Leaf | -- | -- | | |
| 0 | CIS-LINALOOL-OXIDE | Shoot Essent. Oil | -- | -- | | |
| 3 | CIS-OCIMENE | Shoot | -- | -- | | |
| 3 | CIS-OCIMENE | Shoot Essent. Oil | -- | -- | | |
| 3 | CIS-OCIMENE | Essential Oil | -- | -- | | |
| 53 | CITRAL | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 12 | COPPER | Plant | 7 | 7 | -0.7770348996753241 | USDA's Ag Handbook 8 and sequelae) |
| 9 | COSTUNOLIDE | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|---------------------------|-------------------------|----------|--------|-----------|--|
| 57 | COUMARIN | Plant | -- | -- | | |
| 0 | CYCLOHEXENONE | Shoot | -- | -- | | |
| 5 | DEHYDROFALCARINDIOL | Root | -- | -- | | |
| 0 | DEHYDROFALCARINOL | Root | 100 | 100 | | |
| 0 | DEHYDROFALCARINONE | Root | -- | -- | | |
| 0 | DEHYDROFALCARINONOL | Root | -- | -- | | |
| 1 | DI-O-CAFFEOYL-QUINIC-ACID | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | DIACETYLEN | Shoot | -- | -- | | |
| 0 | DIACETYLENE | Shoot Essent. Oil | -- | -- | | |
| 2 | DIHYDROCOUMARIN | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | DIPHENYL-GLYOXAL | Shoot | -- | -- | | |
| 0 | DIPHENYL-GLYOXAL | Shoot Essent. Oil | -- | -- | | |
| 16 | ELEMICIN | Essential Oil | -- | -- | | |
| 16 | ELEMICIN | Shoot | -- | 18.4 | 1 | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|--------------------------|-------------------------|----------|--------|-----------------------|---|
| 0 | ELEMICINE | Shoot | 227 | 2770 | | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | EO | Plant | 1000 | 10000 | 0.019853678703787233 | |
| 0 | EO | Shoot | 1000 | 10000 | -0.027439288511147023 | |
| 0 | EO | Leaf | -- | -- | | |
| 10 | ERIODICTYOL | Shoot | -- | 75 | -1 | |
| 30 | ESCULETIN | Plant | -- | -- | | |
| 30 | ESCULETIN | Shoot | -- | -- | | Wealth of India. |
| 0 | ESCULETIN-DIMETHYL-ETHER | Plant | -- | -- | | |
| 0 | ESCULETIN-DIMETHYL-ETHER | Shoot | -- | -- | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 12 | ESTRAGOLE | Shoot | 100 | 7763 | 1.3723679658914105 | |
| 12 | ESTRAGOLE | Shoot Essent. Oil | 750000 | 814000 | | |
| 12 | ESTRAGOLE | Essential Oil | 100000 | 776300 | 0.4414359501836876 | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|------------------------------|-------------------------|-------------|--------|---------------------|----------|
| 12 | ESTRAGOLE | Leaf Essent. Oil | -- | 690000 | 0.31496006507489993 | |
| 12 | ESTRAGOLE | Seed Essent. Oil | -- | 650000 | 1.2260811936910665 | |
| 12 | ESTRAGOLE | Root Essent. Oil | -- | -- | | |
| 12 | ESTRAGOLE | Leaf | -- | -- | | |
| 0 | ESTRAGONOSIDE | Shoot | -- | -- | | |
| 76 | EUGENOL | Shoot | -- | -- | | |
| 76 | EUGENOL | Essential Oil | -- | -- | | |
| 76 | EUGENOL | Shoot Essent. Oil | -- | -- | | |
| 0 | EUGENOL-4-O-BETA-D-GLUCOSIDE | Shoot | -- | 8 | | |
| 5 | EUGENOL-METHYL-ETHER | Shoot | -- | -- | | |
| 5 | EUGENOL-METHYL-ETHER | Essential Oil | -- | 5300 | -0.5830399519329805 | |
| 5 | EUGENOL-METHYL-ETHER | Shoot Essent. Oil | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|-------------------------|---------|----------|--------|---------------------|---|
| 0 | FAT | Seed | 381000 | 381000 | 0.6089719113994524 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | FAT | Shoot | 72000 | 78000 | 0.5948537047979354 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 61 | FERULIC-ACID | Leaf | 38 | 38 | 2.436082828712669 | |
| 15 | FIBER | Plant | 74000 | 80000 | -1.0558199017143965 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 8 | FRUCTOSE | Leaf | -- | -- | | |
| 8 | FRUCTOSE | Root | -- | -- | | |
| 22 | GABA | Shoot | -- | -- | | |
| 62 | GALLIC-ACID | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 22 | GAMMA-AMINOBUTYRIC-ACID | Root | -- | -- | | |
| 22 | GAMMA-AMINOBUTYRIC-ACID | Leaf | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|-----------------|-------------------------|-------------|--------|----------------------|---|
| 11 | GAMMA-TERPINENE | Shoot | 105 | 1040 | 0.32423748484074105 | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 11 | GAMMA-TERPINENE | Essential -- Oil | | 56900 | -0.04515870825045456 | |
| 8 | GENTISIC-ACID | Leaf | 150 | 150 | 1 | |
| 35 | GERANIOL | Shoot | -- | -- | | |
| 35 | GERANIOL | Shoot Essent. Oil | -- | -- | | |
| 7 | GLUCOSE | Leaf | -- | -- | | |
| 7 | GLUCOSE | Root | -- | -- | | |
| 8 | GLUTAMIC-ACID | Shoot | -- | -- | | |
| 8 | GLUTAMIC-ACID | Root | -- | -- | | |
| 8 | GLUTAMIC-ACID | Leaf | -- | -- | | |
| 5 | GLUTAMINE | Shoot | -- | -- | | |
| 5 | GLUTAMINE | Leaf | -- | -- | | |
| 5 | GLUTAMINE | Root | -- | -- | | |
| 12 | GLYCINE | Shoot | -- | -- | | |
| 12 | GLYCINE | Root | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|------------------------------------|---------------|----------|--------|---------------------|---|
| 12 | GLYCINE | Leaf | -- | -- | | |
| 0 | HEPTA-4,6-DIYNE-1,3-DIOL | Shoot | -- | 22 | | |
| 12 | HERNIARIN | Leaf | -- | -- | | |
| 12 | HERNIARIN | Shoot | -- | -- | | |
| 12 | HERNIARIN | Essential Oil | -- | -- | | |
| 12 | HERNIARIN | Plant | -- | -- | | |
| 8 | HESPERETIN | Shoot | -- | 75 | | |
| 0 | HEX-CIS-3-EN-1-OL-BETA-D-GLUCOSIDE | Shoot | -- | 20 | | |
| 7 | HISPIDULIN | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 30 | HYPEROSIDE | Shoot | -- | -- | | |
| 0 | INULOBIOSE | Root | -- | -- | | |
| 6 | IRON | Plant | 320 | 350 | -0.3261303905390022 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 16 | ISOEUGENOL | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 5 | ISOFRAXIDIN | Shoot | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|--------------------------------|------------------------|----------|--------|----------------------|---|
| 11 | ISORHAMNETIN | Plant | 7 | 7 | | Stitt, Paul. Why George should eat broccoli. |
| 0 | ISOTHUJONE | Shoot | 20 | 200 | | |
| 0 | ISOTHUJONE | Leaf Essent. Oil | -- | 20000 | | |
| 4 | ISOVITEXIN | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | KAEMPFEROL-3-O-RHAMNOGLUCOSIDE | Plant | -- | -- | | |
| 0 | KILOCALORIES | Shoot | 2950 | 2950 | 0.15669724536673543 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | L-PINITOL | Leaf | -- | -- | | |
| 2 | LEUCINE | Shoot | -- | -- | | |
| 2 | LEUCINE | Root | -- | -- | | |
| 2 | LEUCINE | Leaf | -- | -- | | |
| 60 | LIMONENE | Shoot | 25 | 270 | -0.19099565776190747 | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|-------------------------------|------------|-------------------------|--------|-----------|--|
| 60 | LIMONENE | | Essential Oil | -- | | |
| 60 | LIMONENE | | Root Essent. Oil | -- | -- | |
| 0 | LINALOL | | Shoot | -- | -- | |
| 53 | LINALOOL | | Shoot Essent. Oil | -- | -- | |
| 53 | LINALOOL | | Essential Oil | -- | -- | |
| 53 | LINALOOL | | Leaf Essent. Oil | -- | -- | |
| 0 | LINOLENIC-ACID | | Plant | -- | -- | Stitt, Paul. Why George should eat broccoli. |
| 78 | LUTEOLIN | | Plant | -- | -- | Stitt, Paul. Why George should eat broccoli. |
| 0 | LUTEOLIN-7-O-BETA-D-GLUCOSIDE | | Plant | -- | -- | Stitt, Paul. Why George should eat broccoli. |
| 4 | LYSINE | | Shoot | -- | -- | |
| 4 | LYSINE | | Root | -- | -- | |
| 4 | LYSINE | | Leaf | -- | -- | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|--------------------|---------------|----------|--------|---------------------|---|
| 65 | MAGNESIUM | Plant | 3470 | 3470 | -0.1851096725134359 | |
| 2 | MALTOSE | Leaf | 1490 | 4000 | | |
| 14 | MANGANESE | Plant | 80 | 80 | -0.1215300451124085 | USDA's Ag Handbook 8 and sequelae) |
| 63 | MENTHOL | Shoot | 50 | 500 | 0.10999266642586884 | |
| 63 | MENTHOL | Essential Oil | -- | -- | | |
| 30 | MENTHONE | Shoot | -- | -- | | |
| 30 | MENTHONE | Essential Oil | -- | -- | | |
| 0 | METHYL-AMYL-KETONE | Shoot | -- | -- | | |
| 6 | METHYL-CHAVICOL | Plant | 172 | 7000 | 0.4586478149797617 | |
| 20 | METHYL-EUGENOL | Plant | 290 | 2900 | 2.732417724171957 | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 15 | METHYL-ISOEUGENOL | Shoot | -- | -- | | |
| 15 | METHYL-ISOEUGENOL | Essential Oil | -- | -- | | |
| 22 | MYRCENE | Shoot | 80 | 1000 | 0.799029445609138 | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|------------------|-------------------------|---------------|--------|---------------------|--|
| 22 | MYRCENE | | Essential Oil | -- | -- | |
| 3 | N-HENTRIACONTANE | Shoot | -- | -- | | |
| 56 | NARINGENIN | Shoot | 44 | 97 | 1 | |
| 10 | NEROL | Shoot | 670 | 6700 | 3.4616488061589012 | |
| 10 | NEROL | Leaf Essent. Oil | -- | 670000 | 1 | |
| 11 | NEROLIDOL | Shoot | -- | 238 | 0.31301240869615476 | |
| 39 | NIACIN | Plant | 90 | 90 | 0.18616654712916966 | USDA's Ag Handbook 8 and sequelae) |
| 6 | O-CRESOL | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 2 | OCIMENE | Shoot Essent. Oil | -- | -- | | |
| 2 | OCIMENE | Essential Oil | -- | -- | | |
| 18 | OLEIC-ACID | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 25 | P-COUMARIC-ACID | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|-------------------------|-------------------------|----------|--------|---------------------|--|
| 8 | P-CRESOL | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 16 | P-CYMENE | Shoot | -- | -- | | |
| 16 | P-CYMENE | Essential Oil | -- | 24700 | -0.4294696002319138 | |
| 13 | P-HYDROXY-BENZOIC-ACID | Leaf | 14 | 14 | -0.6391623440007327 | |
| 0 | P-HYDROXYCOUMARIC-ACID | Leaf | 4 | 4 | | |
| 0 | P-MENTHA-1,8-DIENE | Shoot | -- | -- | | |
| 0 | P-MENTHA-1,8-DIENE | Shoot Essent. Oil | -- | -- | | |
| 2 | P-METHOXYCINNAMALDEHYDE | Seed | 45 | 450 | | |
| 2 | P-METHOXYCINNAMALDEHYDE | Shoot | 5 | 450 | | |
| 2 | P-METHOXYCINNAMALDEHYDE | Shoot Essent. Oil | -- | 6000 | | |
| 2 | P-METHOXYCINNAMALDEHYDE | Seed Essent. Oil | -- | 45000 | | |
| 2 | P-METHOXYCINNAMALDEHYDE | Leaf Essent. Oil | 5000 | 45000 | | |
| 2 | P-METHOXYCINNAMALDEHYDE | Essential Oil | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|-------------------------------|-------------------------|----------|--------|-----------|--|
| 0 | P-METHOXYCINNAMYL-ALCOHOL | Shoot | -- | -- | | |
| 0 | P-METHOXYCINNAMYL-ALCOHOL | Essential Oil | -- | -- | | |
| 0 | PATULETIN-3-O-GLUCOSIDE | Plant | -- | -- | | |
| 0 | PATULETIN-3-O-RHAMNOGLUCOSIDE | Plant | 120 | 120 | | |
| 2 | PECTOLINARIGENIN | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | PEROXIDASE | Leaf | -- | -- | | |
| 0 | PEROXIDASE | Plant | -- | -- | | |
| 4 | PHELLANDRENE | Shoot Essent. Oil | -- | -- | | |
| 26 | PHENOL | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | PHENOLASE | Plant | -- | -- | | |
| 7 | PHENYLALANINE | Root | -- | -- | | |
| 8 | PHLOROGLUCINOL | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|--------------------|---------|----------|--------|----------------------|---|
| 4 | PHOSPHORUS | Plant | 3130 | 3391 | -0.09498138262187504 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 2 | PHYTOSTEROLS | Plant | 89 | 810 | -0.5460622792095707 | |
| 9 | PINOCEMBRIN | Shoot | -- | -- | | |
| 0 | POLYACETYLENES | Root | -- | -- | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 0 | POLYPHENOL-OXIDASE | Leaf | -- | -- | | |
| 0 | POLYPHENOL-OXIDASE | Plant | -- | -- | | |
| 14 | POTASSIUM | Plant | 30020 | 32719 | 0.7616746965990568 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | PROLINE | Leaf | -- | -- | | |
| 0 | PROLINE | Root | -- | -- | | |
| 0 | PROTEIN | Plant | 228000 | 247009 | 0.6026897753752032 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |

| Chemical | Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|----------|--|-------|---------|----------|--------|---------------------|---|
| 0 | PROTEIN | | Seed | 315000 | 315000 | 0.7223510331064014 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 0 | PROTEIN | | Shoot | 228000 | 247000 | 0.32677337755744273 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 43 | PROTOCATECHUIC-ACID | | Leaf | 3 | 17 | -0.877778451667783 | |
| 176 | QUERCETIN | | Shoot | -- | -- | | |
| 2 | QUERCETIN-3'-METHYLEETHER | | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | QUERCETIN-3-(BETA-D-GALACTOFURANOSYL-6-BETA-L-RHAMNO PYRANOSIDE) | Shoot | -- | -- | | | |
| 0 | QUERCETIN-3-(D-GALACTOFURANOSYL-6-BETA-L-RHAMNO PYRANOSIDE) | Shoot | -- | -- | | | |
| 0 | QUERCETIN-3-(D-GLUCOFURANOSYL-6-BETA-L-RHAMNO PYRANOSIDE) | Shoot | -- | -- | | | |
| 0 | QUERCETIN-3-GLYCO-GALACTOSIDE | Plant | -- | -- | | | |
| 2 | QUERCETIN-3-O-BETA-D-GLUCOSIDE | Plant | -- | -- | | | Stitt, Paul. Why George should eat broccoli. |
| 18 | RHAMNETIN | Plant | -- | -- | | | Stitt, Paul. Why George should eat broccoli. |
| 0 | RHAMNOSE | Leaf | -- | -- | | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|-----------------|---------|----------|--------|---------------------|--|
| 15 | RIBOFLAVIN | Plant | 13 | 14 | 0.18036366581905444 | USDA's Ag Handbook 8 and sequelae) |
| 0 | RIBOSE | Leaf | -- | -- | | |
| 57 | ROSMARINIC-ACID | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 87 | RUTIN | Shoot | 100 | 560 | -0.5313186017977898 | |
| 87 | RUTIN | Leaf | -- | -- | | |
| 5 | SABINENE | Shoot | 370 | 3700 | 3.643649749310963 | |
| 7 | SALICYLATES | Leaf | 35 | 350 | 0.1847218753406517 | |
| 34 | SALICYLIC-ACID | Leaf | 3 | 3 | -1 | |
| 2 | SCOPARIN | Leaf | -- | -- | | |
| 22 | SCOPARONE | Shoot | 8 | 8 | | |
| 44 | SCOPOLETIN | Shoot | -- | -- | | |
| 44 | SCOPOLETIN | Leaf | -- | -- | | |
| 44 | SCOPOLETIN | Plant | -- | -- | | |
| 1 | SERINE | Shoot | -- | -- | | |
| 1 | SERINE | Root | -- | -- | | |
| 1 | SERINE | Leaf | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|---------------|-------------------------|----------|--------|---------------------|---|
| 9 | SINAPIC-ACID | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 1 | SODIUM | Plant | 620 | 620 | -0.2697571581103508 | |
| 0 | SPATHULENOL | Shoot | -- | 108 | 0.18161421122163604 | |
| 0 | SPATHULENOL | Shoot Essent. Oil | -- | -- | | |
| 10 | SQUALENE | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 12 | STIGMASTEROL | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 14 | SUCROSE | Leaf | -- | -- | | |
| 14 | SUCROSE | Root | -- | -- | | |
| 6 | SYRINGIC-ACID | Leaf | 8 | 8 | | |
| 35 | TANNIN | Plant | -- | -- | | |
| 0 | TANNINS | Shoot | -- | -- | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 0 | TANNINS | Leaf | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|---------------------|-------------------------|----------|--------|---------------------|---|
| 31 | THIAMIN | Plant | 2 | 3 | -0.3909910138264638 | |
| 17 | THUJONE | Shoot | 60 | 600 | 1.3555286119343917 | |
| 17 | THUJONE | Leaf Essent. Oil | -- | 60000 | | |
| 0 | TRANS-ALLO-OCIMENE | Shoot | -- | -- | | |
| 0 | TRANS-ALLO-OCIMENE | Shoot Essent. Oil | -- | -- | | |
| 0 | TRANS-ALPHA-OCIMENE | Root Essent. Oil | -- | -- | | |
| 8 | TRANS-ANETHOLE | Shoot | 100 | 10000 | 1 | Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980. |
| 0 | TRANS-BETA-OCIMENE | Essential Oil | -- | -- | | |
| 0 | TRANS-BETA-OCIMENE | Leaf | -- | -- | | |
| 0 | TRANS-ISOELEMICIN | Essential Oil | -- | -- | | |
| 0 | TRANS-ISOELEMICINE | Shoot | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|-------------------------------|-------------------------|-------------|--------|---|----------|
| 0 | TRANS-LINALOOL-OXIDE | Shoot Essent. Oil | -- | -- | | |
| 0 | TRANS-METHYL-ETHER-ISOEUGENOL | Shoot | -- | -- | | |
| 0 | TRANS-METHYL-ETHER-ISOEUGENOL | Essential Oil | -- | -- | | |
| 0 | TRANS-METHYL-ISOEUGENOL | Shoot | -- | -- | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. | |
| 0 | TRANS-OCIMENE | Shoot | -- | -- | | |
| 0 | TRANS-OCIMENE | Shoot Essent. Oil | -- | -- | | |
| 0 | TRANS-OCIMENE | Leaf Essent. Oil | -- | -- | | |
| 0 | TRANS-OCIMENE | Essential Oil | -- | -- | | |
| 8 | TYROSINE | Shoot | -- | -- | | |
| 8 | TYROSINE | Root | -- | -- | | |
| 8 | TYROSINE | Leaf | -- | -- | | |

| Chemical Plant Part | | Low PPM | High PPM | StdDev | Reference | Citation |
|---------------------|---------------|---------|----------|--------|--------------------|--|
| 22 | UMBELLIFERONE | Plant | -- | -- | | Stitt, Paul. Why George should eat broccoli. |
| 0 | VALDINOL-F | Shoot | -- | 12 | | |
| 3 | VALINE | Leaf | -- | -- | | |
| 3 | VALINE | Root | -- | -- | | |
| 24 | VANILLIC-ACID | Leaf | 18 | 18 | 0.8117220703723087 | |
| 3 | XYLOSE | Leaf | -- | -- | | |
| 3 | XYLOSE | Root | -- | -- | | |
| 77 | ZINC | Plant | -- | -- | | |